# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA and	)
ALLEGHENY COUNTY HEALTH DEPARTMENT,	) )
Plaintiffs,	) ) Civil Action No
V.	) )
EASTMAN CHEMICAL RESINS, INC.,	) COMMENT DECREE
Defendant.	) CONSENT DECREE ))

## **TABLE OF CONTENTS**

I. ,	JURISDICTION AND VENUE	2
II.	APPLICABILITY	2
III.	DEFINITIONS	4
IV.	CIVIL PENALTY	8
V.	INSTALLATION, OPERATION, AND MAINTENANCE OF VOC CONTROL DEVICES	9
VI.	INTERIM VOC COMPLIANCE REQUIREMENTS	1
VII.	VOC EMISSIONS TESTING AND PERMIT APPLICATIONS	5
VIII.	MONITORING EQUIPMENT AND RECORDKEEPING	1
IX.	VOC EMISSIONS CALCULATIONS	8
X.	VAPOR PRESSURE TESTING 4	3
XI.	BENZENE WASTE NESHAP AUDIT 4	5
XII.	OPERATION AND MAINTENANCE REQUIREMENTS 4	
XIII.	PERMITS 4	9
XIV.	APPROVAL OF SUBMISSIONS 5	1
XV.	REPORTING REQUIREMENTS	3
XVI.	STIPULATED PENALTIES	6
XVII.	FORCE MAJEURE 6	0
XVIII.	DISPUTE RESOLUTION	3
XIX.	INFORMATION COLLECTION AND RETENTION	6

# Case 2:11-cv-01240-CB-LPL Document 8-2 Filed 12/06/11 Page 3 of 83

XX.	EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS	68
XXI.	COSTS	70
XXII.	NOTICES	70
XXIII.	EFFECTIVE DATE	72
XXIV.	RETENTION OF JURISDICTION	73
XXV.	MODIFICATION	- 73
XXVI.	TERMINATION	73
XXVII	I. PUBLIC PARTICIPATION	74
XXVII	II.SIGNATORIES/SERVICE	75
	INTEGRATION	
XXX.	FINAL JUDGMENT	76
XXXI.	APPENDICES	76

- A. Plaintiff United States of America, on behalf of the United States

  Environmental Protection Agency ("EPA"), and Co-Plaintiff the Allegheny County Health

  Department ("ACHD" or "County") have filed a Complaint against Defendant Eastman Chemical

  Resins, Inc. ("Eastman") seeking injunctive relief and civil penalties for Eastman's alleged

  violations of the Clean Air Act, 42 U.S.C. § 7401 et seq. (the Act"), the ACHD regulations Title

  XXI, which are a portion of the Pennsylvania State Implementation Plan ("PA SIP"), 40 C.F.R.

  Subpart NN, Section 52.2020(c), the 1997 VOC RACT Order (as defined below), and various

  permits at its resin manufacturing facility located in West Elizabeth, Pennsylvania ("the Facility").
- B. On December 23, 2005, EPA issued to Eastman and Hercules Incorporated ("Hercules") a Notice of Violation alleging a failure to comply with certain requirements of the Clean Air Act, the PA SIP, the 1997 VOC RACT Order, and various permits at the Facility. The Notice of Violation is attached hereto as Appendix J.
- C. Eastman is the current owner and operator of the Facility and Hercules is the former owner and operator of the Facility, ownership having passed on or about May 1, 2001, and operational control of the Facility having passed on or about July 1, 2001.
- D. Eastman and Hercules have reached an agreement with respect to the obligations herein and as a result of the agreement, Eastman is the only Defendant named in this Consent Decree.
- C. Eastman does not admit any liability to the United States or ACHD arising out of the transactions or occurrences alleged in the Complaint.
- D. The parties agree that settlement of this matter is in the public interest and that entry of this Consent Decree without further litigation is appropriate.

E. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the Parties, and the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b). Venue lies in this District pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c), and § 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Eastman conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Eastman consents to the Court's jurisdiction over this Decree and any such action, and over Eastman, and consent to venue in this judicial district.
- 2. For purposes of this Consent Decree, Eastman agrees that the Complaint states claims upon which relief may be granted pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b).

#### II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States and ACHD, and upon Eastman and any successors, assigns, or other entities or persons otherwise bound by law.

#### 4. <u>Transfer of Ownership or Operation</u>.

- a. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Eastman of its obligation to ensure that the terms of this Decree are implemented, unless consented to in writing by the United States and ACHD. Eastman shall condition any such sale or transfer on agreement by such transferee and/or successor-in-interest to assume the obligations under this Consent Decree and to submit to the jurisdiction of this Court.
- b. At least thirty (30) Days prior to the transfer of ownership or operation of the Facility, Eastman shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with: i) a description of the proposed transfer agreement and ii) the portions of the agreement relevant to the implementation of the requirements of this Consent Decree to EPA Region III, ACHD, and the United States Department of Justice, in accordance with Section XXII of this Decree (Notices).
- 5. Eastman shall make an electronic or paper copy of this Consent Decree available to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. Eastman shall condition any such contract on performance of the work in conformity with the terms of this Consent Decree.
- 6. In any action to enforce this Consent Decree, Eastman shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

#### III. <u>DEFINITIONS</u>

- 7. Terms used in this Consent Decree that are defined in the Clean Air Act or in regulations promulgated pursuant to the Act, including the Pennsylvania State Implementation Plan approved by EPA, shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:
  - a. "ACHD" or "County" shall mean the Allegheny County Health Department.
- b. "Agencies" shall mean the Environmental Protection Agency and the Allegheny County Health Department.
- c. "Annual" or "Annually" shall mean a rolling 12-month period, which is a period of 12 consecutive months determined on a rolling basis with a new 12-month period beginning on the first Day of each calendar month.
- d. "Batch Process" means a noncontinuous operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of the equipment after the operation ceases and prior to beginning a new operation. Addition of raw material and withdrawal of product do not occur simultaneously in a Batch Process.
- e. "Complaint" shall mean the Complaint filed by the United States and the Allegheny County Health Department in this action.
- f. "Continuous" or "Continuously," as it relates to monitoring shall mean monitored at all times. Operating parameters that are monitored Continuously shall also be recorded at least once every fifteen (15) minutes as specified in this Consent Decree.

- g. "Continuous Monitoring System" or "CMS" shall mean the entire system of equipment used to sample, analyze, and provide a permanent record of operating parameter values from a Process Unit or control device on a Continuous basis. This system of equipment shall be installed, operated, and maintained in accordance with the methodology described in 40 C.F.R. Part 63, Subpart SS or other methodology approved in writing by EPA under this Consent Decree.
- h. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXXI).
- i. "Day" or "Daily" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.
  - j. "Defendant" shall mean Eastman Chemical Resins, Inc.
- k. "EIIP/Chapter 16 Methods" shall mean the methodology described in the Emission Inventory Improvement Program Volume II, Chapter 16, "Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, August 2007, Final."
- l. "EPA" shall mean the United States Environmental Protection Agency and its successor departments or agencies.
- m. "Effective Date" shall mean the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket, as provided in Paragraph 140 of this Consent Decree.

- n. "Facility" shall mean the chemical resin manufacturing facility located in West Elizabeth, Allegheny County, Pennsylvania, currently owned and operated by Eastman and formerly owned and operated by Hercules.
- o. "Flow Indicator" shall mean a device, process, or methodology that indicates whether gas flow from a process to a control device is present.
- p. "MON" shall mean the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, 40 CFR, Part 63, Subpart FFFF.
- q. "One Hour Block Average" shall mean the average of all compliance parameter measurements taken during each consecutive 60-minute period of time beginning at the start of a batch for Batch Processes and beginning at 12:00 a.m. for continuous operations and storage tanks. The One Hour Block Average shall not include measurements recorded during periods when the Process Unit is shut down. Each One Hour Block Average shall be recorded, in addition to the recording requirements of Paragraph 7(f), above. Eastman's compliance with the Outlet Gas Temperature Limit, scrubber differential pressure drop, scrubber liquid flow rate, scrubber liquid temperature, and UHF filter differential pressure drop shall be determined using a One Hour Block Average.
- r. "Outlet Gas Temperature Limit" shall mean a condenser's outlet gas temperature limit established through EPA approval of a Phase I or Phase II VOC Emissions Testing Report. Eastman's compliance with the Outlet Gas Temperature Limit shall be determined using a One Hour Block Average.
- s. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral (e.g. 1, 2, 3, etc.)

- t. "Parties" shall mean the United States, the Allegheny County Health Department and Eastman.
- u. "Polymerizate" or "Poly'd Oil" shall mean (1) an intermediate solution of the final resin product in the solvent in which it was originally polymerized or (2) the product of a polymerization process that includes resin (a mixture of polymers), processing solvent, and oligomer co-product (dimers, trimers, tetramers, pentamers, and optionally hexamers of the feed monomer(s)).
- v. "Potential to Emit" or "PTE" shall be defined as provided in the Allegheny
  County Health Department Rules and Regulations, Article XXI, Section 2101.20.
- w. "Process Unit" means the groups of equipment identified as Process Units in Appendices A through E and Appendix H to this Consent Decree.
- x. "1997 VOC RACT Order" shall mean the Plan Approval Order and Agreement No. 257, Upon Consent, In Re: Hercules Corporation, dated January 14, 1997, and any amendments thereto.
- y. "RACT Proposal" shall mean the reasonably available control technology ("RACT") proposal for Volatile Organic Compounds required by the Allegheny County Health Department Rules and Regulations, Article XXI, Section 2105.06 and required to be submitted by Eastman to the Agencies pursuant to Paragraph 78, below.
- z. "Section" shall mean a portion of this Decree identified by a roman numeral (e.g. I, II, III, IV, etc.).
- aa. "United States" shall mean the United States of America, acting on behalf of EPA.

bb. "Volatile Organic Compounds" or VOCs" shall have the same meaning as provided in 40 C.F.R. Section 51.100(s)

#### IV. <u>CIVIL PENALTY</u>

- 8. Within thirty (30) Days after the Effective Date of this Consent Decree, Eastman shall pay the sum of \$316,000.00 to the United States as a civil penalty.
- 9. Within thirty (30) Days after the Effective Date of this Consent Decree,
  Eastman shall pay the sum of \$316,000.00 to the County as a civil penalty. Civil penalty
  payments due to the County shall be made by check payable to the "Allegheny County Clean Air
  Fund" and sent in care of:

James Thompson ACHD Air Quality Program Manager 301 39<sup>th</sup> Street Clack Health Center, Bldg. #7 Pittsburgh, PA 15201-1891

Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to Eastman, following the date of lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Western District of Pennsylvania, United States Post Office and Courthouse, 700 Grant Street, Pittsburgh, PA, 15219. At the time of its payment, Eastman shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Eastman Chemical Resins, Inc.* and shall reference the assigned civil action number and DOJ case number 90-5-2-1-09001, to

the United States in accordance with Section XXII of this Decree (Notices), below; by email to acctsreceivable.CINWD@epa.gov; and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

11. Eastman shall not deduct any penalties paid under this Decree pursuant to this Section or Section XVI of this Decree (Stipulated Penalties) in calculating their federal or state income tax.

# V. INSTALLATION, OPERATION, AND MAINTENANCE OF VOC CONTROL DEVICES

#### A. Tank 78 and Tank 35 - VOC Control Devices

- 12. If the results of the Phase II VOC Emissions Testing required by Paragraphs 31-34, below, show the Potential to Emit VOCs in excess of one (1) tpy from Tank 78 or from Tank 35, then Eastman shall propose and install on any tank that exceeds one tpy (a) a closed vent system with a condenser, scrubber, oxidizer, carbon adsorber, or another VOC emission control device approved for the tank by the Agencies in writing under this Consent Decree, or (b) a floating roof to reduce VOC emissions from the tank to below one (1) tpy for that tank.
- Paragraph 12, above, through the permit application for the Miscellaneous Equipment Process
  Unit required by Paragraph 37, below, and shall install the approved VOC emissions controls no later than twelve (12) months after obtaining the necessary installation permit, as required by that Paragraph.

#### B. C-5 Process Unit - Tanks 501/502/503/505/506 - Carbon Bed Requirements

- 14. Beginning on the Effective Date of this Consent Decree, when the C-5 Unit's Thermal Oxidizer ("Thermal Oxidizer") is not operating, Eastman shall reroute VOC emissions from Tanks 501/502/503/505/506 (Emission Point S051) and oil/water separator S-3630-1 of the C-5 Unit to a carbon bed to reduce VOC emissions by 95% by weight or to a VOC outlet gas concentration of 20 parts per million ("ppm") or less. This requirement shall not apply during the first 45 minutes after the Thermal Oxidizer shuts down or otherwise unexpectedly goes out of service. During this initial 45 minute period Eastman is not required to reroute VOC emissions from Tanks 501/502/503/505/506 and the oil/water separator at the C-5 Unit to the carbon bed. Eastman shall cease filling Tanks 501/502/503/505/506 and shall cease operating the C-5 Process Unit as soon as practicable after the Thermal Oxidizer shuts down, but in any event no later than thirty (30) minutes after the Thermal Oxidizer shuts down. Eastman shall record all periods during which the Thermal Oxidizer is shut down or is otherwise not operating and shall keep such records for five years from the date of recording.
- 15. No later than the Effective Date of this Consent Decree, Eastman shall install, operate and maintain a colorimetric indicator to monitor the C-5 Unit's carbon bed's performance.
- 16. <u>Permit Application</u>. Eastman shall include proposed permit terms to incorporate the VOC control device and carbon bed requirements of Paragraph 14, and the monitoring requirements of Paragraph 15, above, in the permit application for the C-5 Process Unit required by Paragraph 37, below.

### C. <u>Pilot Plant - Carbon Bed Requirements</u>

- 17. Prior to operating the Pilot Plant's Neutralizer, Reactor, and Funda Filter and before the termination of this Consent Decree, Eastman shall install, and thereafter operate, and maintain, a carbon bed to reduce and control VOC emissions from the combined vents exiting from the Pilot Plant's Reactor and Funda Filter Condenser (S155) and Neutralizer Condenser (S156) for an overall control efficiency of 95% or a 20 ppm or less outlet gas VOC concentration. Eastman's obligation to route VOC emissions from the Pilot Plant's Reactor and Funda Filter Condenser (S155) and Neutralizer Condenser (S156) to the carbon bed shall only apply when any one or more of the Pilot Plant Reactor, Funda Filter, or Neutralizer are in operation and contain VOC emitting materials. Eastman shall operate and maintain a colorimetric indicator to monitor the Pilot Plant's carbon bed's performance.
- 18. <u>Permit Application</u>. Eastman shall include proposed permit terms to incorporate the carbon bed requirements of Paragraph 17 in the permit application for the Miscellaneous Equipment Process Unit required by Paragraph 40, below.

# VI. INTERIM VOC COMPLIANCE REQUIREMENTS

# A. Interim VOC Compliance Requirements of Appendix A to this Consent Decree

19. Beginning on the Effective Date of this Decree and continuing until issuance of a permit or order in accordance with Paragraphs 30 or 36 through 40, below, Eastman shall operate the equipment, tanks and any associated control devices listed in Appendix A in compliance with the requirements identified in Appendix A. Eastman shall monitor each condenser's operating parameters Continuously, except as specifically provided otherwise in Appendix A, and shall record the results at least once every fifteen (15) minutes. For a period of six (6) months following

the Effective Date of this Consent Decree, compliance with operating parameter limits shall be determined using the recordings taken every fifteen-minutes as provided for in Appendix A. Beginning on the date six (6) months after the Effective Date of this Consent Decree, compliance with operating parameter limits shall be determined using a One Hour Block Average. However, the One Hour Block Average shall not be used to determine compliance with the requirements of ACHD Installation Permits No. 0058-I016 and No. 0058-I018, unless such use is approved in writing by ACHD. Eastman shall also record the contents of the tanks identified in Appendix A for inclusion in the tank log as required by Paragraph 53, below. Eastman shall maintain monitoring records required by this Paragraph 19 for at least 5 years from the date of recording.

20. For the equipment and associated control devices listed in Appendix A, the terms of this Consent Decree, including Appendices A-I, shall constitute Eastman's VOC emissions control, monitoring, and recordkeeping requirements to address the violations alleged in the Complaint and Notice of Violation from the time of lodging of this Consent Decree until issuance of a permit or order for the equipment and control device pursuant to Paragraph 30 or Paragraphs 36 through 40, below.

## B. Hydrogenation Process Unit Production Limit and Condenser Venting Time

21. Polymerizate Production Limit. No later than sixty (60) Days after the Effective Date of this Decree, Eastman shall limit the production throughput of Polymerizate from the Hydrogenation Unit to 33.6 million pounds Annually and shall maintain records of the amount of Polymerizate charged into the process each month. Eastman shall record its Daily production in pounds and shall sum the Daily totals at the end of each month. This monthly total shall be added

to the total monthly production for the prior eleven (11) months. Eastman shall calculate a new monthly total each month and shall add it to the previous eleven (11) months' totals.

22. Condenser Venting Time. No later than ninety (90) Days after the Effective Date of this Decree, Eastman shall complete modification of its control system to extend the venting time of the exhaust gas through Condenser E-403-2 from five (5) minutes to at least fifteen (15) minutes to reduce the Vent Tank VOC emissions from emission point S007 by thirty-three (33) percent. Eastman shall accomplish this venting time increase by decreasing the transfer rate of batch liquid from the autoclaves (R-301-1 and R-302-1) to the vent tank (T-303-1) from 200 gallons per minute to no more than 67 gallons per minute ("gpm"). The liquid flow rate shall be monitored using an existing vent tank level transmitter and automatically adjusted to maintain no more than a 67 gpm flow rate via the control valve upstream of the tank. Eastman shall demonstrate the thirty-three (33) percent reduction resulting from the increased residence time through performance of the VOC emissions testing required by Appendix B of this Consent Decree. If the VOC emissions test demonstrate that there is less than a thirty-three (33) percent reduction in VOCs, Eastman shall within sixty (60) Days submit to ACHD, with a copy to EPA, any required permit application or other request for approval to implement process or other changes necessary to achieve the thirty-three (33) percent reduction. Within one hundred and twenty (120) Days after receiving ACHD's written approval of Eastman's proposed process or other changes, Eastman shall implement those changes and retest emission point S007 to demonstrate compliance with the reduction requirement of this Paragraph. Eastman shall not be liable for stipulated penalties for failing to achieve the VOC reduction requirement unless the retest also fails to demonstrate the thirty-three (33) percent reduction. Eastman shall maintain

records of the liquid flow rates as calculated by the change in the vent tank level for five (5) years from the date of recording.

- 23. Compliance With Installation Permit No. 0058-I001, dated August 22, 1999. No. later than ninety (90) Days after the Effective Date of this Consent Decree, Eastman shall achieve, and thereafter maintain, compliance with the requirements of Installation Permit No 0058-I001, dated August 22, 1999, for the following condensers: E-101-4, E-104-2, E-201-2 (a/k/a E-201-1), and E-403-2. No later than thirty (30) Days after the Effective Date of this Decree, Eastman shall submit to ACHD for approval, with a copy to EPA, a compliance plan and schedule of interim milestones to achieve, and thereafter maintain, compliance with Installation Permit No. 0058-I001 by October 1, 2012 for the condensers identified below. Eastman's compliance plan required by this Paragraph 23 shall include methods for minimizing VOC emissions from the following condensers: E-200-6, E-303-2 (a/k/a E-303-3), E-401-2, E-402-2, and E-501-4. Eastman may submit a written request to ACHD to classify condensers E-303-2 and E-501-4 as process condensers and not control devices. If ACHD concurs, Eastman will not be required to include E-303-2 and E-504-1 in its compliance plan and schedule of interim milestones to achieve compliance or to operate those two condensers in compliance with the Interim VOC Applicable Requirements in Appendix A of this Consent Decree.
- 24. <u>Permit Application</u>. Eastman shall include proposed permit terms to incorporate the Polymerizate throughput limits and the 67 gpm flow rate requirements of Paragraphs 21 and 22, above, in the permit application for the Hydrogenation Process Unit required by Paragraph 39, below.

# VII. <u>VOC EMISSIONS TESTING AND PERMIT APPLICATIONS</u>

## A. Phase I VOC Emissions Testing.

- In accordance with the requirements of Paragraphs 26-28, below, Eastman shall 25. conduct Phase I VOC emissions testing on the equipment and associated control devices identified in Appendix B to determine the equipment's controlled and uncontrolled Potential to Emit VOCs and to provide information sufficient for Eastman to develop and submit to EPA for approval pursuant to Paragraph 28, below, either a) hourly and Annual VOC emissions limits for continuous processes or b) pounds per batch and Annual VOC emission limits for Batch Processes. Eastman shall also use this Phase I VOC emissions testing to establish proposed operating parameter limits and any necessary work practice requirements for the equipment and associated control devices listed in Appendix B sufficient to ensure compliance with the proposed VOC emission limits. Eastman shall test the equipment and associated control devices listed in Appendix B during the production of the finished product with the highest solvent vapor pressure for that resin family or use the solvent with the highest vapor pressure, which Eastman has identified in Appendix B. Eastman shall perform the Phase I VOC emissions testing in accordance with the approved protocols required by Paragraph 26, below. The Agencies reserve the right to require additional testing in the event that the materials listed in Appendix B are not the materials with the highest solvent vapor pressure.
- 26. <u>Phase I VOC Emissions Testing Protocols</u>. No later than thirty (30) Days after the Effective Date of this Decree, Eastman shall submit to EPA for approval, with a copy to ACHD, Phase I VOC emissions testing protocols for the equipment and associated control devices identified in Appendix B. Eastman's Phase I VOC emissions testing protocols shall require that

emissions testing be conducted in accordance with the applicable USEPA Methods 1, 2, 3A, 4, 18 and 25A (40 CFR Part 60), or other methods agreed to by EPA in its approval of the Phase I VOC emissions testing protocols, to determine the VOC mass emission flow rate at the inlet of the initial control device and the outlet of the final control device listed in Appendix B. Eastman's proposed Phase I VOC emissions testing protocols, and EPA's approval thereof, shall also accommodate the "Special Conditions" described in Appendix B, where applicable. The Phase I VOC emissions testing protocols shall include requirements that shall be performed with the manufacturing process operating at maximum representative conditions, including, where applicable, the highest operating temperature, pressure, throughput, and emission flow rate, unless the approved protocol provides otherwise. When conducting the Phase I VOC emissions testing, Eastman shall operate the equipment and associated control devices in compliance with the requirements specified in Appendices A and B. Control device parameters, including, where applicable, inlet and outlet condenser coolant temperature and outlet condenser gas temperature, shall be monitored Continuously and the result recorded once every fifteen (15) minutes during the emissions testing. Process parameters, including, where applicable, batch time, batch quantity, operating temperature, raw material, catalyst and solvent type and feed rate, in pounds per hour, product produced and production rate, in pounds per hour, and operating pressure shall be monitored. When a process parameter is continuous in nature, it shall be monitored Continuously and recorded at least once every fifteen (15) minutes, except where provided otherwise in the protocol. For Batch Processes, Eastman shall run the emissions test for three (3) batches for each such process.

27. <u>Performance of Phase I VOC Emissions Testing</u>. Eastman shall complete the required Phase I VOC emissions testing within 300 Days of EPA's approval of the protocols

required by Paragraph 26, above. Eastman shall provide the Agencies with fourteen (14) Days written notice of any scheduled tests related to Phase I emissions testing. If Eastman proposes to use the EIIP/Chapter 16 Methods to calculate its VOC emissions for a piece of equipment or Process Unit at the Facility for purposes of determining compliance with emissions limits or for purposes of complying with the emissions inventory requirements of Article XXI, Eastman shall, in accordance with the requirements of Paragraph 60, below: (a) submit the equations and inputs it plans to use in performing calculations pursuant to EIIP/Chapter 16 to EPA and ACHD at least fourteen (14) Days before beginning the required Phase I VOC emissions testing; and (b) sample the Emissions Testing Product (as shown on Appendix B) associated with the equipment being tested on the day of the Phase I VOC emissions test. Eastman shall provide EPA and ACHD with a copy of the vapor pressure test results within ten (10) Days of Eastman's receipt of the results.

- 28. Phase I VOC Emissions Testing Reports. Eastman shall submit to EPA for approval, with a copy to ACHD, a Phase I VOC Emissions Testing Report for the equipment and associated control devices identified for each Process Unit listed in Appendix B no later than sixty (60) Days after the completion of the Phase I VOC emissions tests for that Process Unit. In the Phase I Emissions Testing Reports required by this Paragraph 28, Eastman shall:
- (a) determine the Potential to Emit VOCs for the equipment and associated control devices listed in Appendix B;
- (b) calculate the mass VOC emissions flow rate at the inlet of the initial control device and the outlet of the final control device identified in Appendix B, to develop a specific emissions factor for the subject equipment and associated control device expressed in pounds of

VOCs emitted per batch for Batch Processes or pounds of VOCs emitted per hour for continuous operations;

- (c) propose hourly and Annual VOC emission limits for continuous processes and pounds per batch and Annual VOC emission limits for Batch Processes, considering PTE, limitations imposed by this Consent Decree, any existing permits, and any applicable ACHD regulations;
- (d) propose Annual production limits that will ensure the proposed VOC emission limits are met;
- (e) propose operating parameter limits and any necessary work practice requirements for the equipment and associated control device, including, where applicable, an Outlet Gas Temperature Limit, and as required by Paragraphs 49-51 below, a One-Hour Block Average differential pressure drop, a One Hour Block Average liquid flow rate, and a One-Hour Block Average exit liquid temperature, if required by Paragraph 50 below, that will ensure the proposed VOC emissions limits are met. Eastman's Phase I Emissions Testing Report shall also include all information from the fugitive emissions testing performed on the C-5 Process Unit UHF filter;
- (f) perform a comparison of the actual VOC emissions measured by the Phase I VOC emissions testing to the VOC emissions predicted using the EIIP/Chapter 16 Methods required by Paragraph 60 of this Consent Decree. This requirement (f) shall not apply if Eastman has not submitted the equations and inputs required by Paragraph 27 of this Consent Decree; and
- (g) include copies of all test results, operating data (e.g., fan speed or fan amps, line/belt speed, type of resin, resin amount pastillated, resin amount bagged), calibration data,

chains of custody, and all equations used and assumptions made in calculating Eastman's proposed VOC emission limits and operating parameter limits, as specified in the protocols approved pursuant to Paragraph 26 of this Consent Decree.

29. <u>EPA Approval of Phase I VOC Emissions Testing Reports</u>. As provided for in Paragraph 82 of this Consent Decree, EPA shall consult with ACHD prior to determining whether Eastman's Phase I VOC Emissions Testing Report may be approved, and EPA's decision shall be final.

## B. Permit Applications for MP Poly and LTC#1/#2 Process Units

30. For the MP Poly Process Unit and the LTC #1/#2 Process Unit, Eastman shall submit to ACHD, with a copy to EPA, complete applications for federally enforceable permits, or the amendment of existing permits, as directed by the ACHD, for the operation of the equipment and associated control devices for these two Process Units. The applications shall incorporate the VOC emission limits, production limits, Outlet Gas Temperature Limit, and other operating parameter limits and any work practice requirements approved by EPA in its approval of the Phase I Testing Reports. Eastman shall submit a permit application within ninety (90) Days of Eastman's receipt of EPA's written approval of the Phase I VOC Emissions Testing Report for the respective Process Unit. The application shall also include proposed permit terms to incorporate the monitoring requirements specified in Section VIII of this Decree and a Preventative Maintenance and Operations Plan that meets the requirements of Paragraph 73, below. Upon issuance, Eastman shall comply with the permits, including any additional emissions testing required by the permits and any revisions, modifications, or reissued versions of the permits issued by ACHD pursuant to Article XXI. The permits will not require that Eastman

re-test equipment initially upon issuance if that equipment was subject to emissions testing under this Consent Decree. Nothing herein shall be construed to modify the Agencies' authority to order testing pursuant to 42 U.S.C. § 7414 or ACHD Article XXII, Section 2108.02.

#### C. Phase II VOC Emissions Testing

In accordance with the requirements of Paragraphs 33 - 36, below, Eastman shall 31. conduct Phase II VOC emissions testing on the equipment and associated control devices identified in Appendix C to determine the equipment's controlled and uncontrolled Potential to Emit VOCs and to provide information sufficient for Eastman to develop either (a) hourly and Annual VOC emissions limits for continuous processes, (b) pounds per batch and Annual VOC emission limits for Batch Processes, or (c) a pound per gallon throughput (for example, 3 lbs per 1,000 gallons throughput) and Yearly VOC emission limit for above-ground storage tank emissions. Eastman shall also use the Phase II VOC emissions testing to establish operating parameter limits and any necessary work practice requirements for the equipment and associated control devices listed in Appendix C sufficient to ensure compliance with the proposed VOC emission limits. Eastman shall test the equipment and associated control devices listed in Appendix C during the production of the finished resin product with the highest solvent vapor pressure for that resin family or use the solvent with the highest vapor pressure, which Eastman has identified in Appendix C. Eastman shall perform the Phase II VOC emissions testing in accordance with the approved protocols required by Paragraph 32, below. The Agencies reserve the right to require additional testing in the event that the materials listed in Appendix C are not the materials with the highest solvent vapor pressure.

32. Phase II VOC Emissions Testing Protocols. No later than ninety (90) Days after the Effective Date of this Consent Decree, Eastman shall submit to EPA for approval, with a copy to ACHD, Phase II VOC emissions testing protocols for the equipment and associated control devices identified in Appendix C. Eastman's Phase II VOC emissions testing protocols shall require that emissions testing be conducted in accordance with the applicable USEPA Methods 1, 2, 3A, 4, 18 and 25A (40 CFR Part 60), or other methods agreed to by EPA in its approval of the Phase II VOC emissions testing protocols, to determine the VOC mass emission flow rate at the inlet of the initial control device and the outlet of the final control device listed in Appendix C. Eastman's proposed Phase II VOC emissions testing protocols, and EPA's approval thereof, shall also accommodate the "Special Conditions" described in Appendix C, where applicable. Such Phase II VOC Emissions Testing shall be performed with the manufacturing process operating at maximum representative conditions, including where applicable, the highest operating temperature, pressure, throughput, and emission flow rate, unless the specific approved protocol provides otherwise. When conducting the Phase II VOC emissions testing, Eastman shall operate the equipment and associated control devices in compliance with the requirements specified in Appendices A and C. Control device parameters, including, where applicable, inlet and outlet condenser coolant temperature and outlet condenser gas temperature, shall be monitored Continuously and the result recorded once every fifteen (15) minutes during the emissions testing. Process parameters, including, where applicable, batch time, batch quantity, operating temperature, raw material, catalyst and solvent type and feed rate, in pounds per hour, product produced and production rate, in pounds per hour, and operating pressure shall be monitored. When a process parameter is continuous in nature, it shall be monitored Continuously and

recorded at least once every fifteen (15) minutes, except where provided otherwise in the protocol. Continuously monitored control device parameters and process parameters shall be averaged using a One Hour Block Average that shall also be recorded. For Batch Processes, Eastman shall run the emissions test for three (3) batches for each such process.

- a. Additional Provision for VOC Testing Tanks 78 and 35. In its Phase II VOC emission testing protocols required by this Consent Decree, Eastman shall include a protocol for testing the uncontrolled VOC mass emission flow rate at the outlet of each tank vent for Tanks 78 and 35. The results of the testing required by the Tank 78 and 35 VOC emission testing protocol shall be used to determine whether either tank emits greater than one (1) tpy of VOCs and whether Eastman is required to install the VOC emission controls required by Paragraph 12 of this Consent Decree.
- b. Additional Provision for the C-5 Process Unit Tanks 501/502/503/505/506. In its Phase II emissions testing protocols required by this Consent Decree, Eastman shall describe for Tanks 501/502/503/505/506 a design evaluation to determine whether the existing carbon beds achieve a 95% control efficiency or a VOC outlet gas concentration of twenty (20) ppm or less at the outlet of the carbon beds in accordance with Appendix I. This design evaluation shall constitute the Phase II VOC emissions test for the tanks 501/502/503/505/506 carbon beds.
- c. Additional Provision for the Pilot Plant. In its Phase II emissions testing protocols required by this Consent Decree, Eastman shall describe for the Pilot Plant a design evaluation to determine whether the condenser and carbon bed control system achieve an overall 95% control efficiency or a VOC outlet gas concentration of twenty (20) ppm or less at the outlet of

the carbon beds, in accordance with Appendix I. This design evaluation shall constitute the Phase II VOC emissions test for the pilot plant carbon bed.

- required Phase II VOC emissions testing within 300 Days of EPA's approval of the protocols required by Paragraph 32, above. Eastman shall provide the Agencies with fourteen (14) Days written notice of any scheduled tests related to the Phase II VOC emissions testing. If Eastman proposes to use the EIIP/Chapter 16 Methods to calculate its VOC emissions for a piece of equipment or Process Unit at the Facility for purposes of determining compliance with emissions limits or for purposes of complying with the emissions inventory requirements of Article XXI, Eastman shall, in accordance with the requirements of Paragraph 60, below: (a) submit the equations and inputs it plans to use in performing calculations pursuant to EIIP/Chapter 16 to EPA and ACHD at least fourteen (14) Days before beginning the required Phase II VOC emissions testing; and (b) sample the Emissions Testing Material (as shown on Appendix C) associated with the equipment being tested on the day of the Phase II VOC emissions test. Eastman shall provide EPA and ACHD with a copy of the vapor pressure test results within ten (10) Days of Eastman's receipt of the results.
- 34. Phase II VOC Emissions Testing Reports. Eastman shall submit to EPA for approval, with a copy to ACHD, a Phase II VOC Emissions Testing Report for the equipment and associated control devices identified for each Process Unit listed in Appendix C no later than sixty (60) Days after the completion of the Phase II VOC emissions testing for that Process Unit. In its review and approval of these testing reports EPA shall consult with ACHD. In the Phase II VOC Emissions Testing Reports required by this Paragraph 34, Eastman shall:

- (a) determine the Potential to Emit VOCs for the equipment and associated control devices listed in Appendix C;
- (b) calculate the mass VOC emissions flow rate at the inlet of the initial control device and the outlet of the final control device identified in Appendix C to develop a specific emissions factor for the subject equipment and control device expressed in pounds of VOCs emitted per batch for Batch Processes, pounds of VOCs emitted per hour for continuous operations, and pounds of VOCs per gallon throughput for above ground storage tank VOC emissions;
- (c) propose hourly and Annual VOC emission limits for continuous processes, pounds per batch and Annual VOC emission limits for Batch Processes, and pound per gallon throughput and Annual VOC emission limits for above ground storage tank emissions, considering PTE limitations imposed by this Consent Decree, any existing permits, and any applicable ACHD regulations;
- (d) propose Annual production limits that will ensure the proposed VOC emissions limits are met; and
- (e) propose operating parameter limits and any necessary work practice requirements for the equipment and associated control device, including, where applicable, an Outlet Gas Temperature Limit, and as required by Paragraphs 49 51, below, a One Hour Block Average differential pressure drop, a One Hour Block Average liquid flow rate, and a One Hour Block Average exit liquid temperature if required pursuant to Paragraph 50, below, that will ensure the proposed emissions limits are met;

- (f) propose operating parameter limits and any necessary work practice requirements for the carbon beds to ensure that the proposed requirements of Paragraphs 32(b) and (c), above, are met;
- (g) perform a comparison of the actual VOC emissions measured by the Phase II VOC emissions testing to the VOC emissions predicted using the EIIP/Chapter 16 Methods required by Paragraph 60 of this Consent Decree. This requirement (g) shall not apply if Eastman has not submitted the equations and inputs required by Paragraph 33 of this Consent Decree; and
- (h) include copies of all test results, operating data, calibration data, chains of custody, all equations used and assumptions made in calculating Eastman's proposed VOC emission limits and operating parameter limits, and any additional information as specified in the protocols approved pursuant to Paragraph 33 of this Consent Decree.
- 35. <u>EPA Approval of Phase II VOC Emissions Testing Report</u>. As provided in Paragraph 81 of this Consent Decree, EPA shall consult with ACHD prior to determining whether Eastman's Phase II VOC Emissions Testing Report may be approved, and EPA's decision shall be final.
  - D. <u>Permit Applications for the Water White Poly, C-5, Hydrogenation, Waste Water Treatment Plant, and Miscellaneous Equipment Process Units</u>
- 36. For the Water White Poly, C-5, Hydrogenation, Waste Water Treatment Plant, and the Miscellaneous Equipment Process Units, Eastman shall submit to ACHD, with a copy to EPA, complete applications for federally enforceable permits for the operation of the equipment and associated control devices listed for each of these Process Units as identified in Appendices B and C on a Process Unit basis. The applications shall incorporate the VOC emission limits, production limits, Outlet Gas Temperature Limit, any other operating parameter limits, and any work practice

requirements approved by EPA in its approval of the Phase I and II Testing Reports. Eastman shall submit a permit application within ninety (90) Days following Eastman's receipt of the EPA's written approval of the last Phase I and/or II Emissions Testing Report for the respective Process Unit. The applications shall also include the monitoring requirements specified in Section VIII of this Decree and a Preventative Maintenance and Operations Plan that meets the requirements of Paragraph 73, below. Upon issuance, Eastman shall comply with the permits, including any additional emissions testing required by the permits and any revisions, modifications, or reissued versions of the permits issued by ACHD pursuant to Article XXI. The permits will not require that Eastman re-test equipment initially upon issuance if that equipment was subject to emissions testing under this Consent Decree. Nothing herein shall be construed to modify the Agencies' authority to order testing pursuant to 42 U.S.C. § 7414 or ACHD Article XXII, Section 2108.02.

- 37. Additional Permit Requirement for Miscellaneous Equipment Process Unit Tank 78 and Tank 35. In the event that the Phase II VOC emissions testing on Tank 78 or Tank 35 determines that either tank has a Potential to Emit VOCs in excess of one (1) tpy, Eastman shall include in the Miscellaneous Equipment Process Unit permit application the requirement to install, operate, and maintain the emission control device required by Paragraph 12, above, on each tank that has the Potential to Emit VOCs in excess of one (1) ton per year. Eastman shall include in the permit application a protocol to conduct a stack test to enable the ACHD to establish an hourly and Annual VOC emission limit and an associated operating parameter or work practice requirements for any control device selected pursuant to Paragraph 12, above.
- 38. Additional Permit Requirement for the C-5 Process Unit Tanks

  501/502/503/505/506. Eastman's permit application for the C-5 Process Unit shall also propose

operating parameters (e.g., colorimetric indicator monitoring) and any necessary work practice requirements based on the design evaluation of the carbon bed for Tanks 501/502/503/505/506 that demonstrates a 95% control efficiency or a VOC concentration of twenty (20) ppm or less. Eastman shall also propose a monitoring system and schedule that will ensure continuous compliance with the required control efficiency or VOC concentration.

- 39. Additional Permit Requirement for the Hydrogenation Process Unit. Eastman's permit application for the Hydrogenation Process Unit shall also include: a) the throughput limit of 33.6 million pounds of Polymerizate Annually as required by Paragraph 21, above; b) a maximum liquid flow rate of 67 gpm from Autoclaves #1 and #2 to the vent tank as required by Paragraph 23, above; c) a VOC emission limit consistent with the requirements of Paragraph 22, above for emission point S007; and d) a requirement to maintain records of the Daily amount of Polymerizate charged into the process, its Annual production volume as required by Paragraph 21 above, and liquid flow rates from Autoclaves #1 and #2 to the vent tank as required by Paragraph 22, above. The Daily amount shall be calculated every Day beginning at 12:00 a.m. for 24 consecutive hours. Upon issuance, Eastman shall comply with the terms and conditions of the permit imposing these requirements.
- 40. Additional Permit Requirement for the Miscellaneous Equipment

  Process Unit Pilot Plant. Eastman's permit application for the Miscellaneous Equipment Process

  Unit shall also contain proposed operating parameters and work practice requirements for the colorimetric indicator monitoring system for the Pilot Plant that demonstrates a 95% control efficiency or a VOC concentration of 20 ppm or less. Eastman shall also propose a monitoring

system and schedule that will ensure continuous compliance with the required control efficiency or VOC concentration.

# E. Additional Product-Specific VOC Emissions Testing Related to Use of EIIP/Chapter 16 Methods

- 41. If Eastman proposes to use EIIP/Chapter 16 Methods to calculate its VOC emissions to determine compliance at existing operations or for emission inventory purposes at the Facility, or both, then Eastman must perform additional product-specific VOC emissions testing on the equipment, associated control devices, and products listed in Appendix D to this Consent Decree. This additional product-specific testing (hereinafter "Product-Specific VOC Emissions Testing") must be performed in accordance with the requirements of Paragraphs 42 through 44, below. Eastman shall:
- a) measure the equipment and associated control device's VOC emissions during the production of each product identified in Appendix D; and
- b) compare the equipment and associated control device's actual VOC emissions to the VOC emissions predicted by EIIP/Chapter 16 Methods.
- 42. Eastman shall perform the Product-Specific VOC Emissions Testing identified in Paragraphs 42 through 44 of this Consent Decree in accordance with the approved protocols required by Paragraph 43 below. No later than January 31st of each year during the duration of this Decree, Eastman shall submit to EPA and ACHD an advisory notice and schedule of any Product-Specific VOC Emissions Testing Eastman plans to conduct during that calendar year. In the event Eastman changes its schedule for Product-Specific VOC Emissions Testing after submitting the notice required by this Paragraph 42, Eastman shall submit to EPA and ACHD an addendum identifying the revisions to the previously submitted schedule.

43. Product-Specific VOC Emissions Testing Protocols. Eastman shall, no later than ninety (90) Days before any proposed Product-Specific VOC emissions test, submit to ACHD, for approval, with a copy to EPA, a Product-specific VOC Emissions Testing protocol for the specific equipment, associated control devices, and products identified in Appendix D. Eastman's Product-Specific VOC Emissions Testing protocols shall require that emissions testing be conducted in accordance with the applicable USEPA Methods 1, 2, 3A, 4, 18 and 25A (40 CFR Part 60) or other methods agreed to by ACHD in its approval of the Product-Specific VOC Emissions Testing protocols to determine the VOC mass emission flow rate at the inlet of the initial control device and the outlet of the final control device, listed in Appendix D. Eastman's proposed Product-Specific VOC Emissions Testing protocols, and ACHD's approval thereof, shall also accommodate the "Special Conditions" described in Appendix D, where applicable. Such Product-Specific VOC Emissions Testing shall be performed with the manufacturing process operating at maximum representative operating conditions, including, where applicable, the highest operating temperature, pressure, throughput, and emission flow rate, unless the approved protocol provides otherwise. Control device parameters, including, where applicable, inlet and outlet condenser coolant temperature and outlet condenser gas temperature, shall be monitored Continuously and the result recorded at least once every fifteen (15) minutes during the emissions testing. Process parameters, including, where applicable, batch time, batch quantity, operating temperature, raw material, catalyst and solvent type and feed rate, in pounds per hour, product produced and production rate, in pounds per hour, and operating pressure shall be monitored. When a process parameter is continuous in nature, it shall be monitored Continuously and the result recorded at least once every

- fifteen (15) minutes, except where provided otherwise in the protocol. For Batch Processes, Eastman shall run the emissions test for three batches.
- Product-Specific VOC Emissions Testing for the equipment, associated control devices, and products listed in Appendix D within ninety (90) Days of ACHD's approval of the protocols required by Paragraph 43, above, or such other time as agreed to in writing by the Parties. Eastman shall provide the Agencies with fourteen (14) Days written notice of any scheduled test related to Product-Specific VOC Emissions Testing. Eastman shall comply with the requirements of Paragraph 60, below, prior to conducting any Product-Specific VOC emissions test.
- 45. <u>Product-Specific VOC Emissions Testing Reports.</u> No later than sixty (60) Days after the completion of the approved Product-Specific VOC Emissions Testing, Eastman shall submit to ACHD, with a copy to EPA, a Product-Specific VOC Emissions Testing Report for the equipment, associated control devices, and products listed in Appendix D that were tested. In its Product-Specific VOC Emissions Testing Reports for the equipment, associated control devices, and products listed in Appendix D, Eastman shall:
- (a) calculate the mass VOC emission flow rate at the inlet of the initial control device and the outlet of the final control device to develop a specific emissions factor for the equipment and associated control devices expressed in pounds of VOC emitted per batch for Batch Processes or pounds of VOCs emitted per hour for continuous operations, and
- (b) perform a comparison of the actual VOC emissions from the tests to the VOC emissions calculated using the EIIP/Chapter 16 Method; and

- (c) include copies of all test results, operating data, calibration data, chains of custody, and equations used and assumptions made in calculating Eastman's VOC emissions, as specified in the protocols approved pursuant to Paragraph 43 of this Consent Decree.
- Permit Application for Use of EIIP/Chapter 16 Methods. If, after completing the Product-Specific VOC Emissions Testing pursuant to Paragraph 41-45, above, Eastman proposes to use the EIIP/Chapter 16 Methods to calculate its VOC emissions for purposes of determining compliance with emissions limits or for purposes of complying with the emissions inventory requirements of Article XXI for any equipment and associated control devices listed in Appendix D, Eastman shall submit to ACHD, with a copy to EPA, a complete application for a federally enforceable permit for such equipment and associated control devices to incorporate the specific EIIP/Chapter 16 Method to be used. The permit application shall include a standard operating procedure ("SOP") and quality assurance/quality control ("QA/QC") plan consistent with the requirements of Paragraph 61, below.

### VIII. INSTALLATION OF MONITORING EQUIPMENT AND RECORDKEEPING

47. <u>Condenser Temperature Probes and Transmitters</u>. On or before ninety (90) Days after the Effective Date of this Consent Decree, Eastman shall complete installation of, and thereafter operate and maintain, temperature probes and transmitters capable of Continuously monitoring outlet gas temperatures from the condensers identified in Appendix E and at the locations listed in Appendix E. The temperature probes used for measurement of outlet gas temperatures shall be certified by the manufacturer to be accurate to within ± 2 percent of the temperature measured in degrees Celsius or ±2.5 degrees C, whichever is greater. Eastman shall record the outlet gas temperature every fifteen (15) minutes while the equipment associated with

the temperature probe and transmitter is in operation and shall maintain records of outlet gas temperatures for at least five (5) years from the date of recording. Eastman shall include proposed permit terms to incorporate the requirements of this Paragraph 47 for the operation and maintenance, monitoring, and recordkeeping for the temperature probes and transmitters in the permit applications required by Sections V and VI of this Consent Decree.

48. Flow Indicators. In the permit applications required by Sections V and VI of this Consent Decree, Eastman may propose the installation, operation, and maintenance of a Flow Indicator capable of indicating whether there is low or no gas flow to the control devices identified in Appendix H with which the Flow Indicator is associated. If Eastman elects to use a Flow Indicator, it shall be used to identify periods of low or no flow which impairs the ability to obtain representative outlet gas temperature measurements, and Eastman shall not include such periods of low or no flow when calculating the One Hour Block Average outlet gas temperature. Eastman shall record the Flow Indicator reading in a manner sufficient to identify periods of low or no flow at the time Eastman records the outlet gas temperature, while the equipment associated with each Flow Indicator (as identified on Appendix H) is in operation. Eastman shall maintain such records for at least five (5) years from the date of recording. In the permit applications required by Sections V and VI of this Consent Decree, Eastman shall include its Flow Indicator proposal and proposed permit terms to incorporate the requirements for the installation, operation and maintenance of, and recordkeeping for, the Flow Indicators required by this Paragraph 48. If Eastman elects not to install Flow Indicators, Eastman shall comply with the Outlet Gas Temperature Limit established through the Phase I and Phase II testing without regard to low or no flow operating periods.

- Flow Rate and Pressure Drop Monitoring Equipment for LTC #1/#2 Scrubbers. 49. Within ninety (90) Days after Eastman's receipt of the final ACHD issued Article XXI permit for the LTC #1/#2 Process Unit contemplated by Paragraph 30 of this Consent Decree, Eastman shall install, and thereafter operate and maintain, monitoring devices capable of Continuously monitoring liquid flow rate and differential pressure drop across the Fume Scrubber (Emission Point S114) and the Berndorf Scrubber (Emission Point S165). The monitoring devices used for measurement of scrubber liquid flow rate shall be certified by the manufacturer to be accurate within ±10 percent of the design scrubber liquid flow rate, and the monitoring devices used to determine differential pressure shall be certified by the manufacturer to be accurate to within a gage pressure of  $\pm 10$ percent of the maximum pressure drop measured. A One Hour Block Average liquid flow rate and a One Hour Block Average differential pressure drop shall be established as required limits for these scrubbers through the approval of the Phase I VOC Emissions Testing Report pursuant to Paragraph 29, above, and the permit application required by Paragraph 30, above. Eastman shall record the liquid flow and differential pressure drop every fifteen (15) minutes while the equipment associated with each scrubber (as identified in Appendix B) is in operation and shall maintain records of the liquid flow rate and the differential pressure drop for at least five (5) years from the date of recording. In the applicable permit applications required by Sections V and VI of this Consent Decree, Eastman shall include proposed permit terms to incorporate the requirements for the installation, operation and maintenance of and recordkeeping for the monitoring devices required by this Paragraph 49.
- 50. <u>Temperature Monitoring Devices for the Scrubbing Liquid at the Fume Scrubber</u> and Berndorf Scrubber. If the Phase I emissions testing results from the Fume Scrubber and the

Berndorf Scrubber show that a change in the temperature of the scrubbing liquid at either scrubber causes a change in VOC emissions of 0.23 lb/hr or greater (which equates to one (1) tpy VOCs on a 8760 hr/yr basis), then Eastman shall install, operate and maintain monitoring devices capable of Continuously monitoring scrubbing liquid temperatures at the Fume Scrubber and the Berndorf Scrubber. The monitoring devices used for measurement of scrubbing liquid temperatures shall be certified by the manufacturer to be accurate to within ± 2 percent of the temperature measured in degrees Celsius or ±2.5 degrees C, whichever is greater. A One Hour Block Average scrubbing liquid temperature limit shall be established pursuant to Paragraphs 28 through 30, above. Eastman shall record the scrubbing liquid temperature every fifteen minutes while the equipment associated with each scrubber (as identified in Appendix B) is in operation and shall maintain records of the scrubbing liquid temperatures for at least five (5) years from the date of recording. In the applicable permit applications required by Sections V and VI of this Consent Decree, Eastman shall include the requirement for the installation, operation and maintenance of and recordkeeping for the monitoring devices required by this Paragraph 50.

Eastman's receipt of the final ACHD issued Article XXI permit for the C-5 Process Unit contemplated by Paragraph 36 of this Consent Decree, Eastman shall install, and thereafter operate and maintain, a monitoring device on the C-5 UHF Filter to Continuously measure the differential pressure drop across the filter to within 0.5 inches of the water column. The monitoring device used to determine differential pressure shall be certified by the manufacturer to be accurate to within a gage pressure of ±10 percent of the maximum pressure drop measured. A One Hour Block Average differential pressure drop shall be established as a required limit for the C-5 UHF Filter through

approval of the Phase I VOC Emissions Testing Report pursuant to Paragraphs 28 and 29, above, and permit application required by Paragraph 30, above. Eastman shall record the differential pressure drop every fifteen (15) minutes while the Process Unit is in operation and shall maintain records of the differential pressure drop for at least five (5) years from the date of recording. In the applicable permit applications required by Sections V and VI of this Consent Decree Eastman shall include the requirements for the installation, operation and maintenance of and recordkeeping for the monitoring devices required by this Paragraph 51.

# 52. Above-Ground Storage Tanks Throughput Monitoring System

- a. No later than 540 Days after the Effective Date of this Decree, Eastman shall complete installation of, and thereafter operate and maintain, an above-ground storage tank monitoring system to measure and record the throughput of solvent, Polymerizate, and raw materials that are pumped into the above-ground storage tanks identified in Appendix G. Eastman shall use the data derived from the throughput monitoring system when maintaining the above-ground storage tank log required by Paragraph 53, below.
- b. Eastman shall include within the throughput monitoring system the installation of a minimum of four (4) mass flow meters, the connection of any necessary tank pump motors, and the programming of the Programmable Logic Control and Distribution Control Systems so that the quantity of material transferred to and from the individual tanks subject to throughput monitoring (as identified in the last column of Appendix F), and associated total Annual throughput of each material are recorded. Eastman shall include the operation, calibration and maintenance of the mass flow meters in the Preventive Maintenance and Operation Plan required by Paragraph 73, below.

c. Eastman shall include the requirements of this Paragraph 52 in its Title V permit application. The requirements of this Paragraph 52 shall survive the termination of this Consent Decree and continue in effect until Eastman's Title V permit becomes effective.

# 53. Above-Ground Storage Tank Log

- a. Within ninety (90) Days of the Effective Date of this Decree, Eastman shall establish and maintain a single log on-site that encompasses each above-ground storage tank ("AST") listed in Table 2 of Appendix F. The Above-Ground Storage Tank Log ("AST Log") shall include information on the parameters listed in Table 1 of Appendix F using the methodologies identified therein. Eastman shall update the AST Log a minimum of once per week and shall make the Log available for inspection by the Agencies. In its Title V permit application Eastman shall include proposed permit terms to incorporate the requirements of this Paragraph 53. The requirements of this Paragraph 53 shall survive the termination of this Consent Decree and continue in effect until Eastman's Title V permit becomes effective,
- b. Beginning on the date the Above-Ground Storage Tank Throughput Monitoring System described in Paragraph 52 is installed and operational, Eastman shall, thereafter, identify in the AST Log the Daily material throughput for each AST identified in Appendix G using that system.
- c. There may be circumstances that warrant the addition or deletion of an AST from the AST Log. When this occurs during the term of this Consent Decree, Eastman shall notify EPA and ACHD in writing thirty (30) Days prior to the addition or deletion of an AST from the AST Log. In this notice, Eastman shall explain the rationale for the addition or deletion of the AST. Where an AST will be added, Eastman shall submit to EPA and ACHD the initial tank parameters,

i.e., the added AST's size, date of installation, control device information if controls are required, current contents, storage temperature (if heated), operating pressure (if other than atmospheric), and vapor pressure of the material stored therein. For such ASTs, Eastman will also propose the methodology by which Eastman will monitor any required AST control device operating parameter limits.

54. Non-Operations Log. Within sixty (60) Days of the Effective Date of this Decree. Eastman shall, for each control device, and monitoring system identified in Appendix A-F and H, begin keeping a written or electronic record of all periods of startups, shutdowns, malfunctions, non-operation, bypasses of control devices, and repairs. Within ninety (90) Days of the Effective Date of this Decree, Eastman shall, for any remaining Process Unit equipment identified in Appendix A-F and H, begin keeping such written or electronic records. Such records shall include the date, times and duration of each event, a brief description of the event, the cause or likely cause of the event, any actions taken to minimize excess VOC emissions during the event, and whether the event and Eastman's actions were consistent with the Preventative Maintenance and Operations Plan submitted to EPA and ACHD as required by Paragraph 73, below, once the Preventative Maintenance and Operations Plan is approved. Eastman may maintain the information required by this Paragraph 55 in multiple, separate locations. In addition, such records shall also include, where applicable, a record of the calibration checks and low- and high-level adjustments for each control device and monitoring system pursuant to the PMO Plan. Eastman shall maintain such records for at least five (5) years from the date of any such event. Nothing in this Paragraph shall be construed to affect any obligation or requirement of Eastman under ACHD Article XXI, Section 2108.01.c.

# IX. <u>VOC EMISSIONS CALCULATIONS</u>

# A. Emissions Calculations to Demonstrate Compliance with VOC Emission Limits

limits have been established through the EPA approval of the Phase I or Phase II VOC emissions testing reports required by Paragraphs 28 and 34, above, Eastman shall calculate VOC emissions to determine compliance with applicable VOC emission limits using the EPA-approved emissions factors and using production data including, where applicable, the number of batches produced for Batch Processes, hours of operation for continuous processes, or AST throughput. When calculating VOC emissions from storage tanks, Eastman shall use TANKS 4.09d software (or the latest version) to account for breathing losses or uncontrolled working losses as provided in Paragraphs 56-58, below. When calculating VOC emissions for compliance purposes, Eastman shall account for and document any change in VOC emissions that occurred as a result of a control device not operating in accordance with the requirements of its applicable permit or order. Eastman shall make the documentation required by this Paragraph available to EPA and ACHD upon request. Nothing in this Paragraph 55 shall limit in any way the Agencies' inherent enforcement discretion or any defenses that Eastman may have to enforcement.

# B. VOC Emissions Calculations for Emissions Inventory Purposes

56. Until the emissions factors referenced in subpart (a) of this Paragraph 56 have been approved by EPA, Eastman shall calculate VOC emissions for purposes of the emission inventory reporting required by ACHD Article XXI, Section 2108.01e, using methods authorized by ACHD. After receiving EPA approval of the Phase I and Phase II VOC Emissions Testing Reports required

by Paragraphs 28 and 34, above, Eastman shall calculate VOC emissions for emissions inventory reporting, except for ASTs, using:

- a) the EPA approved emission factors established through EPA's approval of the Phase I or Phase II VOC Emissions Testing Reports required by Paragraphs 28 and 34, above; and
- b) production data (including, for example, the number of batches produced for Batch Processes or hours of operation for continuous processes).
- 57. Until the emissions factors referenced in subpart (a) of Paragraph 56 have been approved by EPA, Eastman shall calculate VOC emissions for purposes of the emission inventory reporting required by ACHD Article XXI, Section 2108.01e, using methods authorized by ACHD. After receiving EPA approval of the Phase I and Phase II VOC Emissions Testing Reports required by Paragraphs 28 and 34, above, Eastman shall calculate VOC emissions for emissions inventory reporting, for all ASTs with emissions controls as listed in the AST Log, Eastman shall calculate emissions using:
- a) the AST material, throughput data from the Above-Ground Storage Tanks
  Throughput Monitoring System, and production data and/or raw material receipt data; and
- (i) for ASTs with a condenser as the final control, EPA approved pounds per gallon throughput emissions factors established through the Phase I or Phase II VOC emissions testing process set forth in Paragraphs 28 and 34; or
- (ii) for ASTs with a thermal oxidizer or carbon bed as the final control device, calculate uncontrolled emissions utilizing the TANKS 4.09d software (or latest version) and multiply the uncontrolled emissions by the control efficiency for the additional control device to determine controlled emissions; or

- (iii) for ASTs with a floating roof as a final control device, calculate controlled emissions using the TANKS 4.09d software (or latest version); and
- (b) when calculating VOC emissions from storage tanks, Eastman shall use TANKS 4.09d software (or the latest version) to account for breathing losses, unless breathing losses have been established through the 72 hour test required by Appendix C. If the tank flow is so minimal that breathing losses cannot be determined, then Eastman shall use TANKS 4.09d software (or the latest version).
- approved by EPA, Eastman shall calculate VOC emissions for purposes of the emission inventory reporting required by ACHD Article XXI, Section 2108.01e, using methods authorized by ACHD. After receiving EPA approval of the Phase I and Phase II VOC Emissions Testing Reports required by Paragraphs 28 and 34, above, Eastman shall calculate VOC emissions for emissions inventory reporting, for all ASTs without emissions controls as listed in the AST Log, Eastman shall calculate emissions using TANKS 4.09d software (or the latest version) using the AST material throughput from the Above-Ground Storage Tank Throughput Monitoring System and production data and/or raw material receipt data.

# C. EIIP/Chapter 16 Methods and VOC Emissions Calculations

59. Except as approved pursuant to Section IX.B., above, Eastman shall not use EIIP/Chapter 16 Methods to calculate its VOC emissions for compliance purposes and/or for the VOC emissions inventory reporting required by ACHD Article XXI, Section 2108.01e unless it has performed the Product-Specific VOC Emissions Testing provided for in Paragraphs 41-44, above, and received the necessary permit(s) required by Paragraph 46, above. If Eastman performs such

Product-Specific VOC Emissions Testing and obtains the necessary permit(s) to use EIIP/Chapter 16 Methods to calculate its VOC emissions for compliance with VOC emission limits and/or for the VOC emissions inventory reporting, then Eastman shall calculate its VOC emissions for compliance or emissions inventory purposes in accordance with the applicable permit.

60. EIIP/Chapter 16 Methods and the Phase I and Phase II and Product-Specific VOC Emissions Testing Programs. If Eastman proposes to use EIIP/Chapter 16 Methods to calculate its VOC emissions for compliance or emission inventory purposes for a piece of equipment or Process Unit at the Facility it shall, prior to conducting any required VOC emissions testing under this Consent Decree, prepare and submit to EPA and ACHD the equations (expressed as a function of vapor pressure), the inputs to be used to calculate VOC emissions for the equipment and associated control devices to be tested, and the basis for such equations and inputs. Nothing in this Paragraph shall preclude Eastman from using for emissions inventory purposes any specific EIIP/Chapter 16 Method previously approved by ACHD. Eastman shall use as inputs in the calculations required by this Paragraph the physical properties (e.g. vapor pressure) of the material that will be tested and the process operating and control device conditions (e.g., process temperature, pressure, flow rates, and condenser inlet coolant temperature) that will be used during the VOC emissions test for the subject equipment and associated control devices. At least fourteen (14) Days before conducting the tests required by Paragraphs 27, 33, and 44, above, Eastman shall provide to EPA and ACHD the required equations and inputs, except for the vapor pressure, for the specific equipment and associated control devices being tested. To obtain accurate vapor pressure values, Eastman shall sample the material being tested on the day of the emissions test and have its vapor pressure determined in accordance with the requirements of Paragraphs 62 through 66, below, and provide

EPA and ACHD with a copy of the test results within ten (10) Days of Eastman's receipt of the results. Eastman shall provide in the test reports required by Paragraphs 28, 33, and 45, above, the results derived from use of the EIIP/Chapter 16 Methods, including, where applicable, for the specific equipment and associated control devices being tested, the calculated VOC emissions, all data and analysis Eastman used in calculating the VOC emissions, including, but not limited to, all raw data, equations, and calculations used, and all assumptions made, in arriving at calculated VOC emissions using the EIIP/Chapter 16 Methods.

- 61. If Eastman has obtained a permit to use EIIP/Chapter 16 Methods for compliance or emission inventory calculations performed pursuant to ACHD Article XXI, Section 2108.01e, then it shall develop an EIIP/Chapter 16 standard operating procedure ("SOP") and a quality assurance/quality control ("QA/QC") plan that explain how the data inputs will be selected for use in the equations and how all calculations will be made.
  - a. The EIIP/Chapter 16 SOP shall describe:
- (i) all process steps (e.g. vessel filling, heating, depressurization, evaporation, gas sweeping);
- (ii) all equation inputs (e.g. vapor pressure of VOCs, temperature, flow rate, gas/nitrogen flow rate, density);
  - (iii) the sources/documentation for those inputs; and
  - (iv) all assumptions made in the equations/calculations.
- b. The EIIP/Chapter 16 QA/QC Plan shall provide a procedure for making changes to input parameters to any equations or calculations made in the SOP, including but not limited to, changes in vapor pressure, process temperature, pressure, flow rate, and updates to the EPA-

approved software, protocols, and EIIP/Chapter 16 Methods. The QA/QC Plan shall also include a procedure to revise the equations/calculations caused by manufacturing changes.

c. The requirement to develop and implement an EIIP/Chapter 16 SOP and QA/QC Plan may be made a part of Eastman's Article XXI permits, RACT Order, and Title V permit, but the SOP and QA/QC Plans themselves shall not be included therein. The initial SOP and QA/QC Plans must be submitted to ACHD for approval. If Eastman proposes to make a non-substantive change to its EIIP/Chapter 16 SOP or QA/AC Plan, Eastman shall provide a copy of the revised plan to ACHD with an explanation of the change. If Eastman proposes to make a substantive change to its EIIP/Chapter 16 SOP or QA/AC Plan, prior to making any such change Eastman shall provide a copy of the revised plan to ACHD for approval.

### X. <u>VAPOR PRESSURE TESTING</u>

# A. General Vapor Pressure Testing Requirements

and/or compliance purposes; (b) utilize any equations or software (e.g., TANKS 4.09d, WATER9) requiring vapor pressure data for any purpose (e.g., emission inventory); or (c) conduct Product-Specific VOC Emission Testing pursuant to Paragraphs 41-44, above, then Eastman shall determine the vapor pressure of the material (e.g., purchased solvent, recycled solvent, monomers, and intermediates, and molten resins) processed at the Facility in accordance with ASTM Method D 5842-04 "Standard Practice for Sampling and Handling of Fuels for Volatility Measurement" (or latest version) and ASTM Standard D 2879-97, "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope" (or latest version) (hereinafter collectively referred to as "the Isoteniscope Method"). For molten resin,

Eastman may submit an alternative to the Isoteniscope Method for EPA approval. Data supplied by the manufacturer for monomers and purchased solvent that has been derived through the Isoteniscope Method is acceptable. Eastman shall provide EPA and ACHD with copies of all vapor pressure testing results within thirty (30) Days of Eastman's receipt of the testing results. Eastman shall maintain the records of vapor pressure testing for five years from the testing date.

- B. <u>Vapor Pressure Testing Requirements Applicable to Specific Materials and Mixtures</u>
- 63. If resin/solvent mixtures (e.g., Polymerizate or Poly'd Oil) are used in any process, Eastman shall assume the vapor pressure of the solvent to represent the vapor pressure of the resin/solvent mixture in its equations and/or software.
- 64. If molten resins are used in any process, Eastman shall use the vapor pressure of the molten resin having the highest volatility within each of the three resin families (e.g., C-5, pure monomer resins, hydrogenated resins) in its equations and/or software. Eastman has determined that the following materials have the highest volatility for each family of resins and shall test the vapor pressure in accordance with the Isoteniscope Method: Piccotac 9095 (C-5), Kristalex 3085 (pure monomer), and Regalrez 1094 (hydrogenated).
- 65. If viscous liquid resins are used in any process, Eastman shall use the vapor pressure of the specific material in its equations and/or software. Eastman shall determine the vapor pressure of Regalrez 1018, Piccolastic A-5, Piccotac 7050 and Piccotac 1020.
- 66. For any other mixture used on-site, Eastman shall use either (a) the vapor pressure of the component of the mixture with the highest vapor pressure or (b) the vapor pressure of the entire mixture as measured by the Isoteniscope Method in its equations and/or software.

# C. <u>Timing of Vapor Pressure Testing</u>

- 67. Eastman shall measure the vapor pressure of any material (e.g., purchased solvent, recycled solvent, monomer, purchased solvent, recycled solvent, monomers, intermediates, and molten resins) used to manufacture products for commercial sale or rely on vapor pressure data supplied by the manufacturer as provided in Paragraph 62 at the following times:
  - (a) Before the initial use of the vapor pressure in any VOC emissions calculation;
- (b) Yearly, except for molten or liquid resins, which require testing one time; the molten resin tested shall be the resin with the highest volatility within each resin family;
  - (c) Within one week of the introduction of a new monomer or solvent into use; and,
- (d) Within one week of beginning the use of a catalyst with a different Chemical Abstract Service® ("CAS") Registry Number.

# XI. BENZENE WASTE NESHAP AUDIT

- 68. <u>Benzene Waste Operations NESHAP Audit Requirements</u>. Eastman shall complete the measures set forth in this Section to ensure compliance with all applicable requirements of 40 C.F.R. Part 61 Subpart FF ("Benzene Waste Operations NESHAP" or "Subpart FF") and to minimize or eliminate fugitive benzene waste emissions.
- 69. <u>Statement of Work</u>. No later than thirty (30) Days after the Effective Date of this Decree, Eastman shall submit to EPA for approval, with a copy to ACHD, a revised Statement of Work for the benzene waste operations NESHAP audit required by Section XI of this Consent Decree. This revised Statement of Work shall include a protocol for the sampling required by Paragraph 70, below, and the opportunity for EPA to request the additional sampling required by Paragraph 70, below.

- Days after approval of the Statement of Work by EPA, Eastman shall enter into a contract with a third-party to conduct an independent audit of the Facility's compliance with the Benzene Waste Operations NESHAP. The third-party audit shall include, but not be limited to: (a) identification of each waste stream to be included in the calculation of its Total Annual Benzene ("TAB") (e.g., oilwater separator discharge, maintenance wastes, turnaround wastes, fume scrubber blowdown, parts cleaning wastes, process dryer condensates, finishing area wastes, oils, etc.); (b) a review of the calculations and/or measurements used to determine flows of each waste stream and an identification of the benzene concentration in each waste stream (based on at least one sample for benzene concentration at no less than 10 waste streams); and (c) a determination of whether or not the stream is controlled in accordance with the requirements of Subpart FF. All benzene sampling shall be conducted in accordance with 40 CFR 61.355(c)(3)(i)-(iii) and the approved protocol.

  Eastman shall complete this audit within sixty (60) Days following EPA's approval of the statement of work required by Paragraph 69 of this Consent Decree.
- Submission of Benzene Audit Report. Within ninety (90) Days of completing the audit required in Paragraph 70, above, Eastman shall submit to EPA for approval, with a copy to ACHD, a report that sets forth the results of the third-party audit of the Facility's compliance with the Benzene Waste Operations NESHAP (the "Benzene Audit Report"). The Benzene Audit Report shall include revised TAB calculations for the TAB report Eastman submitted in the year prior to that in which the audit is conducted. Based on EPA's review of the Benzene Audit Report, EPA may select up to twenty (20) additional waste streams for sampling of benzene concentration (Benzene Waste Operations NESHAP Phase 2 Sampling or "Phase 2 Sampling"). Eastman shall

conduct the required additional sampling and submit the results to EPA and ACHD within sixty (60) Days of receipt of EPA's written request for Phase 2 Sampling. All benzene sampling shall be conducted in accordance with the test methodology set forth in 40 CFR 61.355(c)(3)(iv) or another test method approved in writing by EPA if lower detection limits are required. Eastman shall use the results of any such Phase 2 Sampling to reevaluate the TAB and the uncontrolled benzene quantity and to amend the Benzene Audit Report, as appropriate. Eastman shall submit to EPA and ACHD a revised Benzene Audit Report including a revised TAB calculation within sixty (60) Days following the completion of the Phase 2 Sampling.

Actions to Implement Benzene Audit Report. If the results of the Benzene Audit Report indicate that Eastman has a TAB over 10 Mg/yr, Eastman shall submit, within sixty (60)

Days after completion of the Benzene Audit Report, or any revision thereof, whichever is later, an implementation plan to EPA and ACHD. The implementation plan is subject to EPA approval and shall identify the actions that Eastman plans to take, and the schedule for those actions, to ensure that the Facility's TAB is below 10 Mg/yr for 2011 and each calendar year thereafter. If Eastman demonstrates that it is technically infeasible to achieve and maintain a TAB of no more than 10 Mg/yr, then Eastman shall, within ninety (90) Days after completion of the Benzene Audit Report or any revision thereof, whichever is later, identify the controls necessary to comply with the requirements of Subpart FF and shall complete installation of the controls within one (1) year of the submission of the Benzene Audit Report.

#### XII. <u>OPERATION AND MAINTENANCE REQUIREMENTS</u>

73. Control and Monitoring Device Preventative Maintenance and Operations Plans. Within ninety (90) Days after the Effective Date of this Decree, Eastman shall submit to ACHD for approval, with a copy to EPA, a Preventative Maintenance and Operations Plan ("PMO Plan") for the control devices and CMSs identified in Appendix A-F and H. Within two hundred forty (240) Days after the Effective Date of this Decree, Eastman shall submit to ACHD for approval, with a copy to EPA, an amendment to the PMO Plan to include any remaining Process Unit equipment identified in Appendix A-F and H. The PMO Plan shall consist of a compilation of Eastman's procedures for good air pollution control practices and minimizing emissions. The PMO Plan shall have as its goals the minimization of emissions from process and control device malfunctions and downtime of CMSs. The PMO Plan shall include, but not be limited to, startup and shutdown procedures, emergency procedures, and the preventative maintenance schedules that coincide with turnarounds of major Process Units. Eastman shall identify all periods, including those listed in 40 C.F.R. § 996(c)(5), when data will not be available for which it may seek exemption from stipulated penalties under Paragraph 101 of this Consent Decree and shall describe how it intends to minimize emissions during such time periods. These time periods shall be clearly identified in a table of the PMO and shall be subject to approval by ACHD. Eastman shall calibrate any mass flow meters used in its above-ground storage tanks throughput monitoring system at the frequency recommended by the manufacturer. Eastman shall implement its approved PMO Plan at all times. including periods of startup, shutdown and malfunction of its Process Units, control devices, and CMSs identified in Appendix A-F and H. Eastman shall maintain the original approved PMO Plan and all subsequent revisions at the Facility for a period of five (5) years and have them available for

review by the Agencies. Eastman shall include relevant portions of the PMO Plan within the individual permit applications required by Sections V - VI. While the requirement to have and implement the PMO Plan may be made a part of Eastman's Article XXI permits, RACT Order or Title V permit, the PMO Plan, itself, will not be included therein.

74. <u>Air Pollution Control Practices</u>. Eastman shall, at all times and to the extent practicable, including periods of startup, shutdown, and/or malfunction, implement good air pollution control practices to minimize emissions from their control device consistent with and as required by ACHD Article XXI, Section 2105.03.

### XIII. PERMITS

- 75. Eastman shall timely identify, apply for, and make best efforts to obtain all required federal, state, or local permits and permit modifications necessary for performing any obligation under this Consent Decree, including without limitation any required permits for construction, installation, and operation of pollution control equipment at the Facility. When applying for any permits required by this Decree, Eastman shall comply with all applicable requirements of ACHD Article XXI, Parts B and C. Eastman shall identify in each permit application submitted pursuant to the requirements of this Consent Decree whether any existing permits apply to the equipment and control devices that are the subject of the permit application. Permit applications required by this Consent Decree shall be submitted, reviewed, and subject to approval pursuant to ACHD's Air Pollution Control Regulations (a/k/a Article XXI), Parts B and C.
- 76. At the time of submission, Eastman shall provide EPA with a copy of each application for a federally-enforceable permit or permit modification required by this Consent Decree.

- 77. The denial of, issuance of or action or non-action by ACHD with regard to any installation or operating permit, permit modification, or new RACT Order required by Paragraph 78, below, for the Facility will not be subject to dispute resolution under Section XVIII (Dispute Resolution) of the Consent Decree; however, Eastman shall have the right to appeal any such ACHD permitting action as provided under the PA SIP. See Article XX1, Section 2102.03.h.
- RACT Proposal. Within ninety (90) Days after Eastman's receipt of the last of the Process Unit-wide Article XXI installation permits for the Facility required by this Consent Decree, Eastman shall submit to ACHD a VOC RACT Proposal for the Facility, that includes an analysis of reasonably available control technology based on current information, including but not limited to, the terms of this Consent Decree, current physical equipment and operations, and EPA's 8-hour ozone standards. The new RACT Order issued pursuant to the VOC RACT Proposal required by this Paragraph shall supercede in its entirety the 1997 RACT Order and shall be proposed by the ACHD through the Pennsylvania Department of Environmental Protection to EPA for incorporation into the Pennsylvania State Implementation Plan.
- Mechanism for Title V Incorporation. Within one hundred eighty (180) Days after Eastman's receipt of the last of the Process Unit-wide Article XXI installation permits for the Facility required by the Consent Decree, Eastman shall update its Title V permit application to include the terms of all Facility installation permits and the new RACT Order if it has been issued. The incorporation of any required terms of this Consent Decree into the Facility's Title V Permit shall be in accordance with ACHD Title V rules (ACHD Article XXI, Part C, Subpart 2), including the applicable administrative amendment provisions of such rules.

80. <u>Emission Credits</u>. Eastman shall neither generate nor use any VOC emission reductions resulting from any projects implemented pursuant to this Decree for the purpose of obtaining netting credits or offsets in any major New Source Review ("NSR"), minor NSR or Prevention of Significant Deterioration ("PSD") permit or permit proceeding.

# XIV. APPROVAL OF SUBMISSIONS

- 81. Any plan, report, or other submission required to be submitted to EPA and/or ACHD for approval under this Consent Decree shall be reviewed and subject to approval in accordance with this Section XIV of this Consent Decree.
- 82. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Consent Decree, the approving government agency or agencies, after consultation with the other government agency, shall in writing: a) request any necessary additional information to enable EPA and ACHD to adequately evaluate the submittal; b) approve the submission; c) approve the submission upon specified conditions; d) approve part of the submission and disapprove the remainder; or e) disapprove the submission.
- 83. In the event that EPA or ACHD requests additional information, Eastman shall provide the additional information to EPA and ACHD in accordance with the time frames set forth in the request. Eastman may request additional time in writing.
- 84. If the submission is approved, Eastman shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of this Decree, or if not specified in this Decree, the schedule and requirements in the approved submission. Eastman may request additional time in writing to take any such action.

- 85. If the submission is conditionally approved or approved only in part, Eastman shall, upon written notice from the approving governmental agency, take all actions required by the approved plan, report, or other item that the approving governmental agency, after consultation with the other governmental agency, determines are technically severable from any disapproved portions, subject to Eastman's right to dispute only the specified conditions or the disapproved portions, under Section XVIII of this Decree (Dispute Resolution).
- 86. If the submission is disapproved in whole or in part, Eastman shall, within forty-five (45) Days or such other time as Eastman, EPA, and ACHD agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval in accordance with this Section. If the resubmission is approved in whole or in part, Eastman shall proceed in accordance with this Section.
- 87. Any stipulated penalties applicable to the original submission, as provided in Section XVI (Stipulated Penalties), below, shall accrue during the 45-Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part.
- 88. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, the approving governmental agency, after consultation with the other governmental agency, may again require Eastman to correct any deficiencies, in accordance with this Section, subject to Eastman's right to invoke Dispute Resolution and the right of EPA and ACHD to seek stipulated penalties as provided in this Section.

- 89. Nothing in this Section or this Decree, including any reference to consultation, shall limit EPA's rights under the law to review, comment on, oversee or veto any proposed permit, permit modifications, or other action taken by a delegated permitting authority under the Act.
- 90. EPA-approved emission limits, production limits, operating parameters limits, and work practice requirements in the Phase I and Phase II VOC emissions testing reports required by Paragraphs 28 and 34, above, shall serve as the basis for the ACHD-issued permits contemplated by Sections VII.B. and D., above; however, nothing in this Paragraph 90 shall modify ACHD's permitting authority and process in Article XXI, Parts B and C.

# XV. REPORTING REQUIREMENTS

91. No later than May 31<sup>st</sup> and November 30th of each year after the Effective Date of this Consent Decree, until termination of this Decree pursuant to Section XXVI (Termination), below, Eastman shall submit to EPA and ACHD a written (either by email or delivery of a hard copy) semi-annual report that shall include for the reporting period: a) the status of the compliance measures identified in Sections V - XII of this Consent Decree and a description of any non-compliance with any requirements of this Consent Decree and an explanation of the likely cause of the non-compliance and of the remedial steps taken, or to be taken, to prevent or minimize such non-compliance; b) a detailed description of any problems encountered or anticipated, together with implemented or proposed solutions; c) the status of permit applications or modifications; and d) a description of any change in operation and maintenance activities that have the potential to affect VOC emissions for the Process Units and tanks identified in Appendices A and F. The report due May 31<sup>st</sup> shall provide the required information for the period between October through March. The

report due November 30<sup>th</sup> shall provide the required information covering the period between April through September.

- 92. If Eastman violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Eastman shall notify the United States, EPA, and ACHD of such violation and its likely duration, in writing, within ten (10) business Days of the date Eastman first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the notice required by this Paragraph 92 is due, Eastman shall so state in the notice. Eastman shall investigate the cause of the violation and shall then submit an amendment to the notice, including a full explanation of the cause of the violation, within thirty (30) Days of the day Eastman becomes aware of the cause of the violation. Nothing in this Paragraph 92 or the following Paragraph 93 relieves Eastman of its obligation to provide the notice required by Section XVII of this Consent Decree (Force Majeure).
- 93. Whenever any event related to Eastman's performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Eastman shall notify EPA and ACHD orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Eastman first knew that the violation or event may pose such a threat. This obligation is in addition to the requirements set forth in the preceding Paragraph. Nothing in Paragraph 92, above, or this Paragraph 93 of this Consent Decree shall be construed to affect any obligation or requirement of Eastman under ACHD Article XXI, Section 2108.01.c.
- 94. All reports required by Paragraphs 91 and 93 of this Consent Decree shall be submitted to EPA and ACHD at the addresses designated in Section XXII of this Consent Decree

- (Notices). All notices and reports required by Paragraph 92 of this Consent Decree shall be submitted to the United States, EPA, and ACHD at the addresses designated in Section XXII of this Consent Decree (Notices).
- 95. All reports submitted by Eastman pursuant to Sections V-X of this Consent Decree and each report submitted by Eastman under this Section XV (Reporting Requirements) shall be signed by the responsible official as defined by Article XXI, Section 2101.20 and include the certification statement set forth below:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon reasonable inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications, including those associated with Paragraph 93, above.

- 96. The reporting requirements of this Consent Decree do not relieve Eastman of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 97. Any information provided pursuant to this Consent Decree may be used by the United States or ACHD in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

### XVI. STIPULATED PENALTIES

- 98. Eastman shall be liable for stipulated penalties to the United States and ACHD for violations of this Consent Decree as specified below, unless excused under Section XVII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any submittal or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.
- 99. <u>Late Payment of Civil Penalty</u>. If Eastman fails to pay the civil penalties required to be paid under Section IV of this Decree (Civil Penalty) when due, Eastman shall pay a stipulated penalty of \$1,000 per Day for each day that the payment is late.
- 100. <u>Interim Compliance Requirements</u>. Eastman shall be liable for stipulated penalties as provided in Table A, below, for violations of the interim compliance requirements of Section VI of this Consent Decree.
- 101. Eastman shall be liable for stipulated penalties as provided in Table A, below, for violations of the remaining requirements identified in Sections V- XII, above, except for the reporting and written submission requirements which are addressed in Paragraph 102, below.

#### TABLE A

	<u>Violation</u>	Stipulated Penalties
a)	Exceedance of an annual VOC emission limit	\$5,000 per exceedance
b)	Exceedance of an annual production limit	\$1,000 per exceedance
c)	Failure to timely install a required VOC emissions control device	\$1,000 per day for each late day

d)	Failure to timely install a required VOC parameter monitoring device	\$750 per day for each late day
e)	Exceedance of an hourly VOC emission limit	\$200 per exceedance, not to exceed \$5,000 per Day per Process Unit
f)	Exceedance of One Hour Block Average parameter limit	\$200 per exceedance, not to exceed \$5,000 per Day per Process Unit
g)	Exceedance of an interim VOC compliance parameter provided in Appendix A	\$100 per exceedance, not to exceed \$5,000 per Day per Process Unit
h)	Failure to comply with the monitoring requirements of this Consent Decree (e.g., for Outlet Gas Temperature Limits, liquid flow rate, differential pressure drop, scrubbing liquid temperature, flow rates, AST Log, Non-Operations Log, PMO Plan) <sup>1</sup>	\$100 per violation, not to exceed \$5,000 per Day per Process Unit, Log or Plan
i)	Failure to comply with the recordkeeping requirements of this Consent Decree (e.g., for Outlet Gas Temperature Limits, liquid flow rate, differential pressure drop, scrubbing liquid temperature, flow rates, AST Log, Non-Operations Log, PMO Plan) <sup>2</sup>	\$100 per violation, not to exceed \$5,000 per Day per Process Unit, Log or Plan
j)	Any other violations of Sections V-XII of the Consent Decree <sup>3</sup>	\$300 per day per violation

Periods when data is not available as specifically identified in the initial ACHD-approved PMO Plan required by Paragraph 73 of this Consent Decree shall not be subject to stipulated penalties.

Periods when data is not available as specifically identified in the initial ACHD-approved PMO Plan required by Paragraph 73 of this Consent Decree shall not be subject to stipulated penalties.

Eastman shall not liable for stipulated penalties for violations of the provisions of Section VII.E and related provisions of Paragraphs 60, 62(a) and 62(c), but any such violations may affect the approvability of the Product-Specific VOC Emissions Testing Reports submitted pursuant to Paragraph 45 of this Decree.

102. Written Submissions and Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section XV (Reporting Requirements - Consent Decree), above, and for each written submission by Eastman under Sections II, V - XI, above, that is untimely or deficient:

Penalty Per Violation Per Day	Period of Noncompliance	
\$375	1st through 30th consecutive Day	
\$750	31st consecutive Day and beyond	

If Eastman in good faith timely submits a report required by this Consent Decree and EPA or ACHD determines that a component of the report is deficient, EPA or ACHD will provide notice in writing of the deficiency prior to demanding a stipulated penalty for a deficient submission and will allow Eastman fourteen (14) Days to correct the deficiency and resubmit the report. In this circumstance stipulated penalties will not begin to accrue until the expiration of this fourteen (14) Day period.

- 103. Except as otherwise specifically provided in this Consent Decree, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.
- 104. Eastman shall pay stipulated penalties to the United States and ACHD within thirty (30) Days of a written demand for stipulated penalties by either Plaintiff. Eastman shall pay 50 percent of the total stipulated penalty amount due to the United States and 50 percent to ACHD.

The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff.

- 105. Either Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.
- 106. Stipulated penalties shall continue to accrue as provided in Paragraph 123 during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of EPA or ACHD that is not appealed to the Court, the Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States or ACHD within forty-five (45) Days of the Effective Date of the agreement or the receipt of EPA's or ACHD's decision or order.
- b. If the dispute is appealed to the Court and the United States or ACHD prevails the Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in subparagraph c, below.
- c. If any Party appeals the District Court's decision and the United States or ACHD prevails, the Defendant shall pay all accrued penalties determined to be owing, together with interest, within thirty (30) Days of receiving the final appellate court decision.
- 107. Eastman shall pay stipulated penalties owing to the United States and ACHD in the manner set forth and with the confirmation notices required by Section IV, above, except that the transmittal letter shall state that the payment is for stipulated penalties and shall specify the violation(s) for which the penalties are being paid.

- 108. If Eastman fails to pay stipulated penalties according to the terms of this Consent Decree, it shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or ACHD from seeking any remedy otherwise provided by law for such failure to pay any stipulated penalties.
- Rights), below, the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for the violations of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Air Act, Eastman shall be allowed a credit, for any stipulated penalties paid to EPA and/or the ACHD, against any statutory penalties imposed for such violation.

# XVII. FORCE MAJEURE

event arising from causes beyond the control of Eastman, of any entity controlled by Eastman, or of Eastman's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Eastman's best efforts to fulfill the obligation. The requirement that Eastman exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force majeure" does not include Eastman's financial inability to perform any obligation under this Consent Decree.

- 111. Eastman may seek relief under these Force Majeure provisions for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval (e.g. approval of emission testing protocols, statements of work) required to fulfill such obligation if Eastman has submitted timely and complete applications, proposals or requests and has taken all other actions necessary to obtain such permit(s) or approval(s).
- 112. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Eastman shall provide:
- a. notice orally, by electronic mail, or by facsimile transmission to EPA and ACHD designees listed in Section XXII (Notices), below, within five (5) business days of when Eastman first knew or should have known by the exercise of due diligence that the event might cause a delay.
- b. An explanation and description in writing to the EPA and ACHD designees in Section XXII (Notices), below, within fifteen (15) Days after Eastman first knew or should have known of the event by the exercise of due diligence, an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; and Eastman's rationale for attributing such delay to a force majeure event if it intends to assert such a claim. Eastman shall include with any notice documentation in Eastman's possession, custody, or control supporting the claim that the delay was attributable to a force majeure event. Failure to comply with the above requirements shall preclude Eastman from asserting any claim of force majeure for that event for the period of time of such

failure to comply, and for any additional delay caused by such failure. Eastman shall be deemed to know of any circumstance of which Eastman, any entity controlled by Eastman, or Eastman's contractors knew or should have known.

- that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Eastman in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event. Eastman shall not be liable for stipulated penalties for the period of any granted extension.
- 114. If EPA, after a reasonable opportunity for review and comment by ACHD, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Eastman in writing of its decision.
- XVIII of this Decree (Dispute Resolution), it shall do so no later than forty-five (45) Days after receipt of EPA's notice. In any such proceeding, Eastman shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Eastman complied with the requirements of Paragraphs 111 and 112, above. If

Eastman carries this burden, the delay at issue shall be deemed not to be a violation by Eastman of the affected obligation of this Consent Decree identified to EPA and the Court.

#### XVIII. <u>DISPUTE RESOLUTION</u>

- 116. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Eastman's failure to seek resolution of a dispute under this Section shall preclude Eastman from raising any such issue as a defense to an action by the United States or ACHD to enforce any obligation of Eastman arising under this Decree.
- Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Eastman sends the United States, EPA, and ACHD a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed sixty (60) Days from the date the dispute arises, unless that period is modified by written agreement of the Parties involved in the dispute. If the Parties involved in the dispute cannot resolve a dispute by informal negotiations, then the position advanced by the United States, after consultation with ACHD, shall be considered binding unless, within forty-five (45) Days after EPA provides Eastman with a written summary of its position on the dispute, Eastman invokes formal dispute resolution procedures as set forth below. Eastman's receipt of EPA's written position shall not be a prerequisite to invoking Formal Dispute Resolution. However, Eastman shall not invoke Formal Dispute Resolution prior to the conclusion of the sixty (60) Day or any extended Informal Dispute Resolution time period.

- 118. Formal Dispute Resolution. Eastman shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and ACHD a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Eastman's position and any supporting documentation relied upon by the company.
- 119. The United States and ACHD shall serve their respective Statements of Position within forty-five (45) Days of receipt of Eastman's Statement of Position. The government agencies' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the government agencies. The United States' Statement of Position shall be binding on Eastman, unless Eastman files a motion for judicial review of the dispute in accordance with the following Paragraph.
- on the United States and ACHD a motion requesting judicial resolution of the dispute. The motion must be filed within forty-five (45) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Eastman's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

121. The United States and ACHD shall each respond to Eastman's motion within the time period allowed by the Local Rules of this Court. Eastman may file a reply memorandum, to the extent permitted by the Local Rules.

#### 122. Standard of Review

- a. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 118, above, pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Eastman shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.
- b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 118, above, Eastman shall bear the burden of demonstrating that its position is consistent with this Consent Decree.
- 123. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Eastman under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 106, above. If Eastman does not

prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVI (Stipulated Penalties), above.

#### XIX. <u>INFORMATION COLLECTION AND RETENTION</u>

- 124. The United States, ACHD, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:
  - a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States or ACHD in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Eastman or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data in Eastman's possession, custody, or control; and
  - e. assess Eastman's compliance with this Consent Decree.
- 125. Upon request, Eastman shall provide EPA and ACHD or their authorized representatives splits of any samples taken by Eastman. Upon request, EPA and ACHD shall provide Eastman splits of any samples taken by EPA or ACHD.
- 126. Until two (2) years after the termination of this Consent Decree, Eastman shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its

contractors' or agents' possession or control, and that relate to Eastman's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or ACHD, Eastman shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

- Paragraph, Eastman shall notify the United States and ACHD at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or ACHD, Eastman shall deliver any such documents, records, or other information to EPA or ACHD. Eastman may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Eastman asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Eastman. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.
- 128. Eastman may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any

information that Eastman seeks to protect as CBI, Eastman shall follow the procedures set forth in 40 C.F.R. Part 2.

129. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or ACHD pursuant to applicable federal, state, or local laws, regulations, or permits, nor does it limit or affect any duty or obligation of Eastman to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XX. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

- 130. This Consent Decree resolves the civil claims of the United States, EPA, and ACHD for the violations alleged in the Notice of Violation and Complaint filed in this action through the date of lodging of this Consent Decree. ACHD and Eastman agree that this Consent Decree satisfies the requirements of Article XXI, Section 2102.04(k)(3).
- enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or ACHD to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal, state, or local laws, regulations, or permit conditions, except as expressly specified in Paragraph 130, above. The United States and ACHD further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Eastman's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

- 132. In any subsequent administrative or judicial proceeding initiated by the United States or ACHD for injunctive relief, civil penalties, other appropriate relief relating to the Facility or Eastman's violations, Eastman shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or ACHD in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 130, above.
- 133. This Consent Decree is neither a permit nor a modification of any existing permit, and shall not be interpreted as such. Compliance with the terms of this Consent Decree does not guarantee compliance with any federal, state, or local laws or regulations. Nothing in this Consent Decree shall be construed to be a ruling on, or determination of, any issue related to any federal, state or local permit.
- 134. This Consent Decree does not limit or affect the rights of Eastman or of the United States or ACHD against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Eastman, except as otherwise provided by law.
- 135. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

## XXI. COSTS

136. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and ACHD shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

#### XXII. NOTICES

137. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

#### To the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-09001

#### To EPA:

Director, Air Protection Division U.S. Environmental Protection Agency Region III (3AP00) 1650 Arch Street Philadelphia, PA 19103 Phone: 215-814-2706

Fax: 215-814-2706 esher.diana@epa.gov

and

Dianne McNally U.S. Environmental Protection Agency Region III (3AP12) 1650 Arch Street Philadelphia, PA 19103 Phone: 215-814-3297 Fax: 215-814-2134

mcnally.dianne@epa.gov

stoltzfus.robert@epa.gov

and

Robert Stoltzfus U.S. Environmental Protection Agency Region III (3RC10) 1650 Arch Street Philadelphia, PA 19103 Phone: 215-814-2695 Fax: 215-814-2603

#### To ACHD:

Edward J. Peresie
Air Quality Program Enforcement Chief
Allegheny County Health Department
301 39<sup>th</sup> Street, Bldg. #7
Pittsburgh, PA 15201-1891
Phone: 412-578-7963
Fax: 412-578-8144

Michael Parker, Esq. Assistant Solicitor Allegheny County Health Department 301 39<sup>th</sup> Street, Bldg. #7 Pittsburgh, PA 15201 Phone: 412-578-8320

Fax: 412-578-8144 mparker@achd.net

eperesie@achd.net

### To Defendant Eastman:

Gerald R. Kuhn, Plant Manager Eastman Chemical Resins, Inc. P.O. Box 567

West Elizabeth, PA 15088-0567 Phone: 412-384-2520, ext. 2222

Fax: 412-384-7311 gkuhn@eastman.com

and

Brett A. Sago, Senior Counsel Eastman Chemical Company P.O. Box 511 Kingsport, TN 37622

Phone: 423-229-4827 Fax: 423-229-1895 bsago@eastman.com

- 138. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.
- 139. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

#### XXIII. EFFECTIVE DATE

140. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

### XXIV. RETENTION OF JURISDICTION

141. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XVIII (Dispute Resolution), above, and XXV (Modification), below, or effectuating or enforcing compliance with the terms of this Decree.

#### XXV. MODIFICATION

- 142. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court. Modifications of deadlines or schedules under this Decree that are agreed to in writing by all parties shall not constitute material changes to the Decree for purposes of this Paragraph 142.
- 143. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XVIII of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 122, above, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

#### XXVI. <u>TERMINATION</u>

144. After Eastman has completed the requirements of Sections V - XII, above, and has maintained satisfactory compliance with this Consent Decree and any permits issued pursuant to Paragraphs 30 and 36-40, above, for a period of twelve (12) months from date of the last permit issued pursuant to Paragraphs 30 and 36-40, above, submitted its Title V permit application as required in Section XIII (Permits), above, complied with all other requirements of this Consent

Decree, including those relating to the Preventive Maintenance and Operation Plans required by Paragraph 73, above, and Eastman has paid the civil penalties and any accrued stipulated penalties as required by this Consent Decree, Eastman may serve upon the United States and ACHD a Request for Termination, stating that Eastman has satisfied these requirements, together with all necessary supporting documentation.

- Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether has Eastman satisfactorily complied with the requirements for termination of this Consent Decree. If the United States, after consultation with ACHD, agrees that this Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating this Decree.
- 146. If the United States, after consultation with ACHD, does not agree that this Decree may be terminated, then Eastman may invoke Dispute Resolution under Section XVIII, above. However, the Defendant shall not seek Dispute Resolution of any dispute regarding termination under Paragraph 116 of Section XVIII (Dispute Resolution), above, until at least sixty (60) Days after service of its Request for Termination.

# XXVII. PUBLIC PARTICIPATION

147. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Eastman consents to entry of this Consent Decree without further notice

and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of this Decree, unless the United States has notified Eastman in writing that the United States no longer supports entry of this Decree.

### XXVIII. SIGNATORIES/SERVICE

- 148. Each undersigned representative of Eastman, ACHD, and the Assistant Attorney
  General for the Environment and Natural Resources Division of the Department of Justice certifies
  that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to
  execute and legally bind the Party he or she represents to this document.
- 149. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Eastman agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

#### XXIX. INTEGRATION

150. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Decree and supercedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than submissions that are subsequently submitted and approved pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

## XXX. FINAL JUDGMENT

151. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, ACHD, and Defendant.

### XXXI. <u>APPENDICES</u>

152. The following appendices are attached to and part of this Consent Decree:

Appendix A is titled "Interim Clean air Act Applicable VOC Requirements"

Appendix B is titled "Phase I VOC Testing"

Appendix C is titled "Phase II VOC Testing"

Appendix D is titled "Additional Product-Specific VOC Testing"

Appendix E is titled "Process Gas Outlet Condenser Temperature Probes/Transmitter Installation Points"

Appendix F is titled "Aboveground Storage Tank Log"

Appendix G is a diagram titled "Aboveground Storage Tank Material Throughput Monitoring System by Operating Unit"

Appendix H is titled "Low/No Exit Gas Flow Sources"

Appendix I is titled "Eastman's Design Evaluation Requirements"

Appendix J is titled "Notice of Violation"

Dated and entered this _	day of	2011.
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U.	NITED STATES DISTRICT	JUDGE
W	estern District of Pennsylvar	nia T

The Undersigned Parties enter into this Consent Decree in the matter of United States v. Eastman Chemical Resins, Inc. (W.D. Pa.) relating to alleged violations of the Clean Air Act.

FOR PLAINTIFF UNITED STATES OF AMERICA:

9-14-11 Date

W. BĚNJAMIN FISHEROW

Acting Chief

Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice

DONNA D. DUER

Trial Attorney

**Environmental Enforcement Section** United States Department of Justice P.O. Box 7611, Ben Franklin Station Washington, DC 20044-7611 202-514-3475 Donna Duer@usdoj.gov

DAVID J. HICKTON UNITED STATES ATTORNEY WESTERN DISTRICT OF PENNSYLVANIA

9-28-11

Date

s/Paul E. Skirtich PAUL E. SKIRTICH Assistant U.S. Attorney Western District of Pennsylvania 700 Grant Street, Suite 4000 Pittsburgh, PA 15219 (412) 894-7418 PA ID No. 30440 E-mail: Paul.Skirtich@usdoj.gov

The Undersigned Parties enter into this Consent Decree in the matter of *United States v. Eastman Chemical Resins, Inc.* (W.D. Pa.) relating to alleged violations of the Clean Air Act.

ON BEHALF OF THE ENVIRONMENTAL PROTECTION AGENCY:

Date

SHAWN M. GARVIN

Regional Administrator

U.S. Environmental Protection Agency, Region III

1650 Arch Street (3RA00)

Philadelphia, PA 19103-2029

9/21/11 Date

MARCIA E. MULKEY

Regional Counsel (3RC00)

U.S. Environmental Protection Agency, Region III

1650 Arch Street

Philadelphia, PA 19103-2029

Date

**A. ROBERT STOLTZFUS** 

**Assistant Regional Counsel** 

U.S. Environmental Protection Agency, Region III

1650 Arch Street (3RC10)

Philadelphia, PA 19103-2029

stoltzfus.robert@epa.gov

The Undersigned Parties enter into this Consent Decree in the matter of *United States v. Eastman Chemical Resins, Inc.* (W.D. Pa.) relating to alleged violations of the Clean Air Act.

#### FOR PLAINTIFF ALLEGHENY COUNTY HEALTH DEPARTMENT:

9/23	14
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Date

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BRUCE W. DIXON, M.D.

Director

Allegheny County Health Department

3333 Forbes Avenue Pittsburgh, PA 15213

Phone: 412-578-2243 Fax: 412-578-8325 bdixon@achd.net

9 23/11 Date

FOR Henry

HENRY MILLER, III

**Solicitor** 

Allegheny County Health Department

3333 Forbes Avenue Pittsburgh, PA 15213 Phone: 412-578-8320

Fax: 412-578-8325 hmiller@achd.net

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MICHAEL A. PARKER

**Assistant Solicitor** 

Allegheny County Health Department

301 39t" Street, Bldg. #7

Pittsburgh, PA 15201

Phone: 412-578-8320 Fax: 412-578-8144

mparker@achd.net

The Undersigned Parties enter into this Consent Decree in the matter of United States v. Eastman Chemical Resins, Inc. (W.D. Pa.) relating to alleged violations of the Clean Air Act.

FOR DEFENDANT EASTMAN CHEMICAL RESINS, INC.:

9-9-2011 Date

BRAD LICH, Sole Director Eastman Chemical Resins, Inc.